

October 6, 2023

CNR IMEM

IT-38123 – TRENTO POVO
ITALY

Your references:

CUP B33C22000710006

CIG 9919415037

CUI F80054330586202300345

Procedure Code: IMEMPA###0003

TECHNICAL QUOTATION FOR BENEQ TFS 200 ATOMIC LAYER DEPOSITION SYSTEM

Dear Customer,

Referring to your request for clarification, I confirm that basic pressure is $< 10 \text{ E-3}$.

With the primary dry vacuum pump, the initial vacuum level is $1,5\text{-}2 \times 10 \text{ E-3}$ but when the integrated turbo pumping automatically starts, then the vacuum level will be $< 10 \text{ E-3}$ (exact value $5 \times 10 \text{ E-6}$).

As the system has been requested to be ellipsometer compatible for future use for ellipsometer, this ellipsometer compatible vacuum chamber is also used to pump integration allowing the ultrahigh vacuum level $< 10 \text{ E-3}$. The ellipsometer compatible vacuum chamber includes secondary pump (Peak pumping speed $95 \text{ m}^3/\text{h}$ and typical ultimate pressure for pump without purge $5 \times 10^{-6} \text{ mbar}$) as standard delivery.

We found that in the Annex 10, instead of the letter "e" should be "-6" as described above:

The delivery includes Pfeiffer Adixen A604H dry pump to reach 10 E-e mbar base pressure.

The delivery includes Pfeiffer Adixen A604H dry pump to reach 10 E-6 mbar base pressure.

Best regards,

Kari Koski